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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,734	12/13/2001	Robert E. Medsker	GT-5420 (GC-GU)	8884
7590 11/10/2003 Robert F. Rywalski, Esq. OMNOVA Solutions Inc. 175 Ghent Road Fairlawn, OH 44333			EXAMINER ASINOVSKY, OLGA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/015,734	MEDSKER ET AL.	
	Examiner	Art Unit	
	Olga Asinovsky	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-19 and 21-62 is/are pending in the application.
- 4a) Of the above claim(s) 21-34, 41-43 and 55-61 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-19, 44-54 and 62 is/are allowed.
- 6) ☐ Claim(s) 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The cancellation of claims 1 and 20 is noted.

Claims 21-34 and 41-43 are standing withdrawn from consideration as non-elected invention.

Newly added independent claim 44 became first independent claim replacing claim 1.

1. Newly submitted claim 55 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The independent claim 55 is "a block copolymer prepared by a process comprising polymerizing at least one type of oxetane monomer in the presence of a hydroxyl-terminated polymer to provide the block copolymer." Claim 55 is a product-by-process requiring search a polymerization of an oxetane monomer in the presence of a hydroxyl-terminated polymer, wherein the oxetane monomer is polymerizing in the presence of a boron trifluoride catalyst (dependent claim 60). The original claims require fluorooxetane monomers. The phrase "at least one type of oxetane monomer" can include an isocyanate terminated oxetane that is not the issue of the present invention. The phrase "at least one type of oxetane monomer" is ^{broader} ~~broader~~ than the definition of oxetane monomer having ether side chain(s) which is/are terminated by a fluorinated aliphatic group, which is the issue of the present invention. There is no terminal fluorinated aliphatic group in said at least one type of oxetane monomer in claim 55. There is no process of polymerization of an oxetane monomer in the presence of a hydroxyl-terminated polymer in the original claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 55 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 56-60 stand withdrawn from consideration in light of their dependency directly or indirectly upon the withdrawn above claim 55.

2. Newly submitted claim 61 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 61 is a process for preparing a block copolymer, the process comprising polymerizing at least one type of oxetane monomer in the presence of a hydroxyl-terminated polymer. This process has a potential restriction. There is no process claim in the original claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 61 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. The rejection of claims 1-20 under 35 U.S.C. 102(b) as being anticipated by Hargis et al U.S. Patent 5,674,951 is withdrawn, because the independent newly claim 44 (replacing claim 1) requires "an ether linkage" such that a first block is connected to the second block via an ether linkage. Hargis discloses "urethane linkage." Because Hargis discloses the reaction product of non-fluorinated poly(alkylene oxide) polyols

and/or polyester polyols with isocyanate terminated oxetane prepolymer, column 1, lines 43-45.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 35-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hargis et al U.S. Patent 5,674,951.

The rejection is set forth at pages 2-4 of the office action mailed on April 18, 2003 and is incorporated here by reference.

5. Applicant's arguments filed August 28, 2003 have been fully considered but they are not persuasive.

Independent claim 35 is a product-by-process. Applicants' argument is that claim 35 discloses: "a block copolymer is formed by polymerizing oxetane monomer in the presence of a hydroxyl-terminated hydrocarbon polymer." A plurality of polymerizable oxetane monomer forms an oligomer or polymer. Therefore, a first block polymer is readable as an oligomer or polymer. In ex parte prosecution, product-by-process claims are met by any product, no matter how made, that is the same as product made by the recited process, *In re Thorpe*, 777 F2d 695, 227 USPQ 964 (Fed. Cir. 1985).

The oxetane monomes are readable in applicants' claims, column 2, line 20. Any polyhydric alcohol having more than 2 hydroxyl groups including polybutadienes containing terminal hydroxyl groups are readable in the present claims, column 3, lines 47-49. Any linkage would be expected in the present claim 35.

Allowable Subject Matter

6. The following is a statement of reasons for the indication of allowable subject matter:

The new search has been made for a reaction product of a plurality of oxetane monomers having fluorinated aliphatic pendant group(s) for producing a first block and a second block comprising a hydroxyl-terminated olefin polymer, wherein the first block is connected to the second block via an ether linkage. The closest reference is U.S. Patent 6,383,651 to Weiner[†] et al. However, Weiner[†] discloses a product produced by reaction of a polyoxetane block having at least one pendant ether group having a terminal fluorinated group and polyester having hydroxyl terminal group to form an ester linkage.

Claims 2-19, 44-54 and 62 are deemed to contain allowable subject matter.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 703-308-0041. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Olga Asinovsky
Examiner
Art Unit 1711

O.A.
O.A.
October 30, 2003


RABON SERGENT
PRIMARY EXAMINER